



MINING AND REGULATION: VOISEY'S BAY

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## MINING AND REGULATION: VOISEY'S BAY

#### INTRODUCTION

As the Minister of Natural Resources Canada, the Honourable Anne McLellan, said when she appeared before the House of Commons Standing Committee on Natural Resources on 28 November 1995, "...this is a decisive time for mining in Canada. Mineral exploration is on the rise...we must ensure a regulatory regime that is conducive to both investment and environmental protection....We currently have a number of important discoveries that could create hundreds of permanent new jobs. The diamond project of BHP ...in the Northwest Territories and Voisey's Bay in Newfoundland come to mind." (1)

The approval process of the BHP project is taking place under the former environmental assessment guidelines process. The Voisey's Bay development, however, will be one of the first major projects to come under the new environmental approval process set in place in January 1995 under the Canadian Environmental Assessment Act. Voisey's Bay is therefore likely to provide a test case for the effectiveness of Canada's regulatory system in regard to large resource projects. Many informed observers are calling for streamlining of the regulatory system and possibly even a "single window" approach. Canadian mining companies are reported to be spending millions in faraway places such as Chile that they see as less costly, less regulated and more friendly places to do business. In increasingly uncertain and highly competitive markets, money tends to go to the lowest-cost, less-explored areas. Voisey's Bay offers just such a profile since the ore is rich and close to the surface. The find is already being touted as the future site of the lowest-cost nickel in the world and probably the

<sup>(1)</sup> Anne McLellan, *Notes for a Speech*, to the House of Commons Standing Committee on Natural Resources, Ottawa, 28 November 1995, p. 1-2.

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second-largest nickel mine anywhere. Voisey's Bay thus offers a possibility for attracting international interest back into the North American market. From reading the press coverage, one gains the impression that mining companies will be watching Voisey's Bay very closely for signs of regulatory effectiveness in order to gauge whether the regulatory climate is favourable for mineral investment.

Running the project on a cost-effective basis will be especially important since the Newfoundland government has made clear that it is capping at \$20 million the credit that companies are entitled to use to offset their mining tax in the first 10 years of a new operation. The credit was previously open-ended. A 10% processing allowance encourages companies to process minerals in the province, with an additional 10% for refining.

# OWNERSHIP OF THE PROJECT

Since the extent of the find has become known, companies have been expressing their desire to acquire an interest in the ore body. Teck Corp. made an astute move when it picked up 10.4% in April 1995 for \$108 million or \$36 a share. In early June 1995, Inco Ltd. paid \$525 million for a 30% interest in the nickel discovery. Since then, Falconbridge and Inco have been bidding for a major stake in the development, which could represent as much as 8% of current world nickel production. In early April 1996, Robert Friedland, Co-Chairman of Diamond Fields Resources Inc., the owner, announced he had accepted Inco's offer of \$4.3 billion for 75% ownership of Voisey's Bay at \$41 a share. As the world's largest nickel miner, Inco was seeking to protect its international market share.

A lawsuit delayed completion of the acquisition until August 1996. Exdiam Corp., a diamond company once headed by Diamond Fields Co-chairman Jean-Raymond Boulle, was claiming all assets of Diamond Fields as compensation for diverting Exdiam corporate information to raise money to finance Voisey's Bay. The company agreed to drop its suit in return for a U.S. \$25 million cash payment.

<sup>(2) &</sup>quot;Diamond Deposits Still Elusive in Labrador," Northern Miner, 4 September 1995.

#### PROJECT DESCRIPTION

Stumbled upon in late 1993 by Newfoundland prospectors looking for diamonds, Voisey's Bay was projected by Vancouver-based Tech Corporation in July 1995 to contain 31.7 million tonnes of base metal proven reserves with an average grade of 2.83% nickel, 1.68% copper, and 0.12% cobalt per tonne. The ore is almost twice as rich as the average grades in the Sudbury nickel basin of Canada. The copper and cobalt in the deposit are viewed as a fringe benefit; they will provide enough revenue to pay for nickel processing, thereby helping to keep down the costs of the project. In late April 1996, Inco boosted an early estimate of the deposit, saying the field could hold 150 million tonnes of ore based on the company's understanding of the geology of the area. By the year 2000 the company expects Voisey's Bay to be producing 270 million pounds of nickel, 200 million pounds of copper and 10 million pounds of cobalt annually.<sup>(3)</sup>

Voisey's Bay is located near the Labrador coast, within 10 kilometres of deep tidewater, about 330 kilometres northwest of Goose Bay. The project is at present in the exploration phase. Well over 100 holes have been drilled and thousands of metres of drill core logged. Exploration is also continuing at an adjacent discovery in the Eastern Deeps.

To support the current phase of activity, Voisey's Bay Nickel Company Ltd., the operator, has applied for more permanent infrastructure support than the tent camp that was put in place in late 1994. On 15 January 1996, the company sought the approval of the Newfoundland government to proceed with a road, dock, airstrip and camp to allow the exploratory activities to advance while feasibility studies for the mine are undertaken. The company takes the position that only once these feasibility studies are completed will it be in a position to register the anticipated mine/mill project in accordance with applicable environmental assessment processes. Tech Corp. is under contract to complete a mine feasibility study on behalf of the owner, Diamond Field Resources Inc.

After the exploration phase, the developer explained at information sessions held in May 1996 in St. John's, that the project would move into the major construction phase of the mine and the mill, projected to take 18 months and involve about 250 persons. During

<sup>(3)</sup> Allan Robinson, "Voisey's 50% Richer: Inco," Globe and Mail (Toronto), 24 April 1996.

the operational phase, about 300 people will be employed. Although there will be no quotas or preferences in the hiring of aboriginals or in the granting of contracts, the company is offering training and hiring incentives.

The Ovoid deposit, located near Discovery Camp, as shown in Figure 1, would be developed as an open pit mine. The next likely source of ore is the Eastern Deeps, located southeast of the Ovoid zone. This ore body would be developed as an underground mining operation 1,000 metres below the surface but only once the ore from the Ovoid had been extracted.

Ore would be hauled from the open pit to a primary crusher, where it would be crushed to less than 200 mm in diameter, before being transferred by conveyor to the concentrator. The haul road would be constructed during initial mine development.

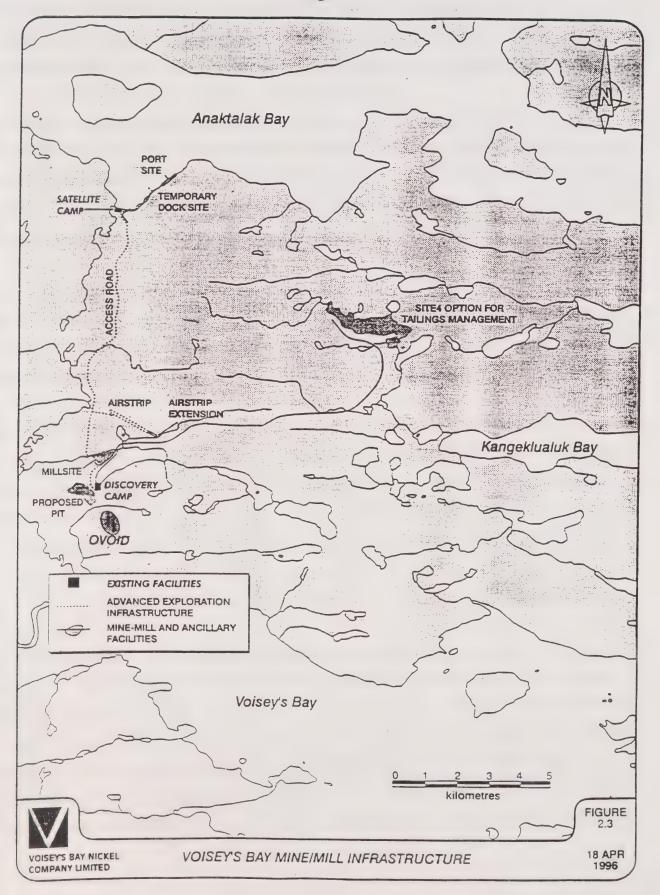
The proposed mine plan calls for seven-days-a-week, year-round mining operations with the work force likely rotating two weeks on and two weeks off.

Acid-generating and non-acid-generating waste would be managed separately at both the Ovoid and Eastern Deeps locations. To prevent acid generation, tailings would be stored in long-term water cover, either in an artificial or a natural freshwater body or through confined marine disposal. The proponent favours using natural water bodies found near the development site.

The ore would be processed on site, producing nickel-cobalt and copper concentrates and a tailings product. The two concentrate products would be trucked to a concentrate facility adjacent to the port site on Anaktalak Bay for further processing while the tailings would be pumped to storage. The proponent would like to locate the processing plant near to the mine, but the alternative site would be at the port, to which the ore could be trucked. Concentrates would await shipment in a storage facility adjacent to the mill.

The proponent proposes to build a port facility in Anaktalak Bay and an airstrip close to the mill site. It is proposed to extend and widen the strip used during the exploration phase, as shown in Figure 1. It is considered feasible to use the port year-round to ship in equipment and supplies for project operation and ship out the concentrates. Approximately 25 kilometres of gravel roads will be required to link up facilities during project construction and operation. No direct road or rail link is planned to southern Labrador or Quebec.

5 Figure 1



On-site facilities to support mining activity would include diesel-powered electrical power facilities, accommodations for 400 construction personnel and 200 operational personnel, maintenance shops and warehouses, a water supply system and waste management systems.

The proponent has made a commitment to comply with all applicable legislation and regulations and has prepared an Environmental Management Plan for its operations. The company will develop a contingency plan for accidents and takes cumulative impacts into account in its environmental monitoring program. It is also committed to minimizing residual environmental impacts at the project site upon mine closure and will develop a mine closure plan.

Some analysts have estimated it could be 1999 before Diamond Fields or its successor has the permits in place to start production. Meanwhile, Archean Resources Ltd., a private company headed by the two Newfoundland prospectors, has a contract to manage the drilling program until December 1996. It owns a 3% net smelter royalty interest in the discovery.

Both the timing and the location of the discovery are auspicious. There is currently a strong demand for nickel, particularly from the stainless steel industry, which consumes about 60% of world nickel production. The balance is used to make batteries, metal plating and nickel alloy for the aerospace industry. Some forecasts put annual production at the new sites at 65,000 tonnes of nickel, equal to about 8% of world nickel production.

### LAND CLAIMS

The proposed undertaking is in an area of overlapping land claims by the 5,000-member Labrador Inuit Association (LIA) and the 1,500 member Innu Nation. The LIA represents Inuit and native settlers of partial Inuit ancestry who live primarily in five communities along the eastern shore: Nain, Hopedale, Postville, Makkovik, and Rigolet. Nain, a former fishing village, has a population of 1,200, and is the nearest town to the nickel find, being located 35 kilometres to the north of the proposed mine site. The LIA comprehensive land claims, under negotiation since 1978, reflect traditional occupancy of the



coastline and some of the interior. The LIA, Canada and Newfoundland signed a Framework Agreement setting out the details of the claims negotiation process on 30 November 1990. In March 1993, the LIA tabled its proposal for an agreement-in-principle and tripartite negotiations have been ongoing since 20 December 1993.

The Innu of Labrador number about 1,500 and live primarily in two communities: Davis Inlet and Sheshatshui. They are represented politically by the Innu Nation. Following evidence of serious social and health issues, in April 1994 the government made a commitment to the Innu on transfer of services, self-government, relocation and land claims. Land claims negotiations with the federal and provincial governments had resumed in the previous month. Negotiators initialled a land claim framework agreement in October 1995 covering land rights, access to resources, environmental management, sharing of revenues from resource development, harvesting rights and self-government.

The aboriginal peoples want a halt on development until their land rights are resolved and there has been a full environmental review of the social and environmental consequences of the project. They have requested that the exploration and development stages be assessed as one single project and they have threatened to go to court to stop a piecemeal approach. They believe that the infrastructure proposed is not needed for the exploration stage but is merely a means of proceeding with mine development without triggering the *Canadian Environmental Assessment Act*. Should the mine proceed, the aboriginal people want a say in how it is developed and want to share in its training and employment benefits.

The proponent company has indicated it will abide by the terms of any new arrangements that are subsequently put in place. It claims that the existing environment is known and characterized so that potential environmental effects can be reliably predicted and proven mitigative measures can be undertaken. The Newfoundland government would also like to see the claims settled expeditiously. Leaders of the Labrador Inuit Association are trying to hammer out a protocol agreement with the Newfoundland government that will give aboriginal people a say in mine development until such time as the land claims are settled. If the bid is unsuccessful, the LIA has threatened to apply to the Supreme Court of Canada to stop the mine until claims to about 14 million hectares in northern Labrador are resolved. More recently, the LIA has softened its stance by saying that if it is able to work out an agreement with the new owner, Inco Ltd., it would consider allowing mineral development, even though the land claims are not settled.

The initial reaction of the Labrador Innu to mine development took the form in February 1995 of a 12-day stand-off with the RCMP at the project site. Their negotiations with Diamond Fields in the summer of 1995 achieved little in concrete terms. The sudden rush of mineral fever in an area that, until now, has supported only a subsistence lifestyle, threatens to change the aboriginal way of life for ever. Not surprisingly, aboriginal peoples are suspicious of mining companies which come into a remote area, ignore local interests, operate only as long as the mine is profitable, and leave behind a legacy of environmental impacts, abandoning the community as cavalierly as they arrived.

The reputation of the proposal's main promoter is also causing some concern in the aboriginal community. Robert Friedland was the Chief Executive Officer of Galactic Resources Ltd., a company responsible for a notorious environmental disaster at Summitville, Colorado, in the late 1980s when a toxic spill of cyanide and heavy metals went into the Rio Grande water system. The bankrupt company left the U.S. Environmental Protection Agency with a \$100-million bill for decontaminating the mine site and nearby waterways. (4)

There is a precedent for protection of aboriginal rights pending land claims settlement. In the case of the Nanisivik mine in the Arctic there was some interim protection for Inuit rights and interests during the land claims negotiation process. Although the provincial government, which has jurisdiction over the land in Voisey's Bay, has permitted some exploratory drilling to continue, certain lands adjacent to aboriginal communities were exempted from such activity until July 1997. (5)

Canada and Newfoundland still need to reach an understanding on an equitable sharing of responsibilities for the settlement and implementation of land claims in Labrador. Land claims negotiations aim to establish certainty and clarity of rights to ownership and use of land and resources in a manner that will facilitate and stimulate economic development. Following the Confederation of Newfoundland with Canada in 1949, aboriginal peoples were left in a constitutional limbo. The 1949 terms of union transferred "lands reserved for Indians" to Canada just as if Newfoundland had joined Canada in 1867. This prevented the

<sup>(4)</sup> Jacquie McNish, "Friedland on Offensive over Toxic Spill Incident," Globe and Mail (Toronto), 13 March 1996.

<sup>(5)</sup> Indian and Northern Affairs Canada, Information Sheet 62, February 1996 and telephone conversations with Newfoundland government officials, 18 July 1996.

provincial legislature from exercising any authority to enact legislation in relation to Indians. Yet because, unlike Indians in the rest of Canada, Indians in Newfoundland had the right to vote, had never entered into a treaty and did not reside on reserves or other "Indian Lands," the *Indian Act* was never applied in Newfoundland.

The Innu made a complaint to the Canadian Human Rights Commission, which in August 1993 reported that "to this day the Government of Canada has not acknowledged in an unequivocal way its direct constitutional responsibility for the Innu as aboriginal people in Canada." This ruling affects the Inuit, since a 1939 Supreme Court decision established that there was federal responsibility for them to the same extent as there is for Indians. This constitutional irritant has sourced relations between Newfoundland aboriginal groups and the federal and provincial governments. Today Canada provides funding through agreements administered by the province for housing, infrastructure, education, health care, and social and cultural development.

#### THE REGULATORY SYSTEM

In May 1993, the National Advisory Board on Science and Technology issued its report Competitiveness in the Canadian Mining and Forestry Industries. The Board acknowledged the resource industries as the mainstay of Canada's prosperity, contributing 45% of total exports. Today, however, the industries face serious challenges. "New and aggressive foreign competitors with lower supply and wage costs, increasing use of alternate materials, more rigorous customer demands, fast shifting trade patterns, and changing economic and fiscal environments are threatening the very survival of the Canadian resource sector." Competitiveness for the resource industries appears to depend as much on the economic and regulatory environment as it does on productivity. Foreign governments are

<sup>(6)</sup> Adrian Tanner et al., Relations between Aboriginal Peoples and Government in Newfoundland and Labrador, A Research Report for the Governance Project, Royal Commission on Aboriginal Peoples, St. John's, Newfoundland, January 1994.

<sup>(7)</sup> Committee on the Competitiveness of the Resource Industries, Competitiveness in the Canadian Mining and Forest Industries, Report of the National Advisory Board on Science and Technology presented to the Prime Minister of Canada, Ottawa, May 1993.

<sup>(8)</sup> Ibid., p. i.

using investment, and environmental and incentive policies to encourage investors to explore, exploit and export local resources. The managers of Canada's resource industries evidently consider that the uncertainty and economic risk associated with the inconsistent application of "environmental assessment" processes are discouraging investment and are impediments to competitiveness. They attribute much of the problem to jurisdictional overlap between departments at both levels of government.<sup>(9)</sup>

A government-industry task force also reviewed Canada's international competitiveness with respect to mineral investment capital. It reported in September 1993 that, "although there exists rich anecdotal evidence of the industry's experience with environmental assessments and permitting processes, little empirical evidence has been gathered to document those experiences in detail. Part of that problem is that it is not always clear what caused the delay or other incident that could be described as causing inefficiency."(10) In the projects documented, it remains unclear as to what extent delays in the process could be attributed to the behaviour of regulatory officials. Quite often they can be attributed to the failure of the proponent to provide all the necessary information or to meet design or remedial requirements. Until more detailed and firmly documented evidence is generated, it is not possible to determine the exact cause of the regulatory delays; (11) however, at least in the eyes of industry, it is the environmental, rather than the health and safety or technical requirements that are the problem. This section consequently concentrates on the environmental aspects of regulation, even though at the exploration stage of mining it must be borne in mind that numerous permits, licences and approvals are required from the various levels of government.

Since the early 1970s, governments at all levels have been taking steps to implement environmental protection legislation. This has led to a complex network of environmental regulatory regimes in Canada. Environmental regulation involves assessment

<sup>(11)</sup> *Ibid.*, p. 43.



<sup>(9)</sup> *Ibid.*, p. 19.

<sup>(10)</sup> Intergovernmental Working Group on the Mineral Industry, Canada's Environmental Regulatory Systems: Current Issues, Background Study on Environmental Regulatory Concerns by a Government/Industry Task Force on the Canadian Mineral Investment Climate, September 1993, p. 42.

of the impact of human activities on the environment and protection of the environment through such measures as waste management, emissions standards and reclamation requirements. Some of the apparent complexities derive from the shared jurisdiction over environmental matters.

A 1982 Resource Amendment to the *Constitution Act*, section 92A, granted the provinces exclusive power to legislate in relation to the development, conservation and management of their non-renewable resources. The question arises as to the extent to which the federal government should intrude into assessments of projects largely within provincial jurisdiction. Environmental assessment is seen by some provinces, notably Quebec, as an attempt by the federal government to take back authority under the guise of protecting the environment. Although the federal government inevitably plays less of a role than the provinces in the regulation of the mining industry, federal environmental regulations still have a considerable impact with regard to federal lands, and transboundary and international matters.

The federal government's legislative framework for environmental protection and assessment includes the 1988 Canadian Environmental Protection Act, the 1992 Canadian Environmental Assessment Act, the Fisheries Act (which predates Confederation), and the 1886 Navigable Waters Protection Act.

The potential for conflict and overlap can be seen in the pertinent Newfoundland legislation that would apply to a project such as Voisey's Bay. Newfoundland has an *Environmental Assessment Act* (1981) and Regulations (1984), and a *Fisheries Act* (1970), besides specific legislation to protect such sectors as water, wildlife and parks.

A 1993 survey<sup>(13)</sup> of possible areas of duplication, however, did not reveal any real concerns with overlap between the two governments, even prior to proclamation of the *Canadian Environmental Assessment Act*. This new Act provides that if a province is obliged to conduct an environmental assessment that also calls for federal review, the federal and the

<sup>(12)</sup> Intergovernmental Working Group on the Mineral Industry, *Duplication and Overlap in Environmental Protection Regulations in Canada*, Background Study on Environmental Regulatory Concerns by a Government/Industry Task Force on the Canadian Mineral Investment Climate, September 1993, p. 16.

<sup>(13)</sup> Ibid., p. 58.

provincial government will conduct one joint review. There have, however, evidently been few projects in Newfoundland for which both levels of government have required environmental assessments.

The new Liberal government promised in 1994 to streamline the regulatory regime and reduce costly federal-provincial overlap and duplication. Industry Minister John Manley and Natural Resources Minister Anne McLellan both expressed support publicly and indicated they would work with the industry and provinces to bring about change by the end of 1995. The February 1996 Speech from the Throne reaffirmed that proposed regulatory reform would promote better coordination and strong and clear requirements, as well as minimizing delays.

Alberta, Manitoba, Nova Scotia and B.C. have entered into agreements to coordinate federal-provincial environmental assessments through local "single window" offices. In the case of B.C., it will even be the province's standard that applies. Similar agreements are being worked out for Ontario and Saskatchewan. Since an overall bilateral agreement does not yet exist between Ottawa and St. John's, the two governments are working to develop a project-specific agreement to avoid duplication in environmental assessment activities.

The "single window" offices will assist in improving communications with industry. In addition, the Canadian Environmental Assessment Agency is developing generic guidelines for the mining industry in its preparation of environmental impact statements, thus providing greater certainty for a proponent with respect to information requirements. The guidelines are to be released before the fall of 1997. (14)

In regard to Voisey's Bay, the intention is to develop a joint assessment process that will ensure timely decisions and lessen duplication of effort. Discussions at the national level are also revolving around setting time-lines for issuing approvals so that there will be more certainty in the system once the environmental obligations have been met.

Government for its part is also trying to harmonize its regulatory involvement in the federal assessment process. The Canadian Environmental Assessment Agency is

<sup>(14)</sup> Natural Resources Canada, Streamlining Environmental Regulation for Mining, the Federal Government's Response to the Interim Report of the House of Commons Standing Committee on Natural Resources, June 1996, p. 9.



developing a code of practice (Federal Coordination Regulation) to ensure that federal environmental assessments are timely and are efficiently coordinated among federal authorities under the Canadian Environmental Assessment Act. (15) The code will be promulgated before the end of 1996.

The concept of the lead agency, whereby one federal department becomes the chief co-ordinator for all the federal issues, is also emerging. In the case of Voisey's Bay, Natural Resources Canada is currently bringing together the federal responsibilities. When the project reaches the development phase, the lead role may fall to the Department of Fisheries and Oceans.

Federal public reviews are being strealined to make them more consistent, timely, predictable, open and efficient. By December 1996, the Canadian Environmental Assessment Agency will introduce a federal regulation to include time lines that will shorten the panel environmental review process. This will also apply to provincial processes in cases where the federal government has entered into bilateral agreements.

#### CONCLUSIONS

In today's buoyant investment climate, the government appears anxious to persuade mining companies that Canada is a good place in which to invest and develop a mine. It is attempting to remove any regulatory roadblocks that might discourage such investment. Smoothing the environmental path ought not to mean rendering environmental tools ineffective, however. There is a general move by government away from regulating, leaving the industry to self-monitor its activities. The mining industry has shown itself responsible in this regard with a voluntary program to accelerate reduction or elimination of 12 toxic substances by the year 2000. (16) Nevertheless, government will continue to have the important role of ensuring that those affected by major resource developments do not suffer long-term socio-economic or environmental consequences.

<sup>(15)</sup> *Ibid*.

<sup>(16)</sup> Ibid., p. 21.

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Canada has been compared unfavourably in investment terms to such places as Mexico and South America; factors cited include past holdups over the environmental assessment review processes. Yet the examples of adverse environmental consequences abroad in recent years suggest that avoiding environmental regulation in order to attract investment capital can have human and, in the long run, very expensive, consequences. Voisey's Bay may be a wonderful chance to offer the world a great investment opportunity but it should also be a worldclass example of how a megaproject can be effectively managed so as to bring benefits rather than hardships to local inhabitants.







